

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

In re Application of: Petteri Putkiranta	Confirmation No.: 1591
Application No.: 09/646,802	Examiner: Huy C. Ho.
Filed: October 17, 2000	Group Art Unit: 2617

For: METHOD AND SYSTEM FOR EXPLOITING LOCATION-DEPENDENT
SERVICES IN A CELLULAR RADIO SYSTEM

Commissioner for Patents
Alexandria, VA 22313-1450

APPEAL BRIEF

Dear Commissioner:

This Appeal Brief is submitted in support of the Notice of Appeal dated September 21, 2012.

I. REAL PARTY IN INTEREST

The real party in interest is Nokia Corporation, a corporation organized under the laws of Finland and having a place of business at Keilalahdentie 4, FIN-02150 Espoo, Finland. The above referenced patent application is assigned to Nokia Corporation.

II. SUMMARY OF THE CLAIMED SUBJECT MATTER

The claimed invention addresses problems associated with provisioning and delivering services offered by a network to a mobile service. Specifically, the claimed invention relates to

the utilization of information concerning the location of a mobile station for the purpose of providing services.

Independent Claim 5 recites:

5. An apparatus comprising:

at least one processor; and

at least one memory including computer program code for one or more programs,

the at least one memory and the computer program code configured to, with the at least one processor, cause the apparatus to perform at least the following (*see, e.g.*, specification, P4/L34-P5/L31, P10/L28-P11/L11; FIGs. 1 and 4),

generate a message when the apparatus determines that the apparatus arrives in a localized service area, the message specifying that the apparatus is in the localized service area (*see, e.g.*, specification, P11/L12-29; FIG. 5);

cause, at least in part, transmission of the message to a communications system (*see, e.g.*, specification, P11/L12-29; FIG. 5); and

receive, in response to the message, one or more available services localized based upon the localized service area (*see, e.g.*, specification, P11/L12-29; FIG. 5).

Independent Claim 7 recites:

7. A method comprising:

generating, at a mobile station, a message when the mobile station determines that it arrives in a localized service area, the message specifying that the mobile station is in the localized service area (*see, e.g.*, specification, P11/L12-29; FIG. 5); and

causing, at least in part, transmission of the message to a communications system (*see, e.g.,* specification, P11/L12-29; FIG. 5); and

receiving, in response to the message, one or more available services localized based upon the localized service area (*see, e.g.,* specification, P11/L12-29; FIG. 5).

Dependent Claim 19 recites:

19. A method of claim 7, wherein the localized service area is an airport or a cafeteria (*see, e.g.,* specification, P9/L34-P10/L21; FIG. 3).

Dependent Claim 20 recites:

20. An apparatus of claim 5, wherein the apparatus determines that the apparatus arrives in the localized service area by:

comparing a current geographic location of the apparatus with a geographic definition of the localized service area stored at the apparatus (*see, e.g.,* specification, P11/L12-29; FIG. 5),

and

determining the apparatus is located in the localized service area when the current geographic location of the apparatus is within the geographic definition of the localized service area (*see, e.g.,* specification, P11/L12-29; FIG. 5).

Dependent Claim 21 recites:

21. An apparatus of claim 20, wherein the apparatus is further caused to:

receive control information from a plurality of base stations, the control information including geographic coordinates of each respective one of the base stations (*see, e.g.,* specification, P11/L12-29; FIG. 5); and

average the geographic coordinates of the base stations to obtain the current geographic location of the apparatus (*see, e.g.,* specification, P11/L12-29; FIG. 5).

Independent Claim 22 recites:

22. A computer-readable storage medium carrying one or more sequences of one or more instructions which, when executed by one or more processors, cause an apparatus to at least perform the following steps (*see, e.g.,* specification, P4/L34-P5/L31, P10/L28-P11/L11; FIGs. 1 and 4):

generating a message when the apparatus determines that the apparatus arrives in a localized service area, the message specifying that the apparatus is in the localized service area (*see, e.g.,* specification, P11/L12-29; FIG. 5); and
cause, at least in part, transmission of the message to a communications system (*see, e.g.,* specification, P11/L12-29; FIG. 5); and
receiving, in response to the message, one or more available services localized based upon the localized service area (*see, e.g.,* specification, P11/L12-29; FIG. 5).

III. ARGUMENT

A. CLAIMS 5, 7-9, 14, 16-19, 21, 22 and 24-28 ARE NOT RENDERED OBVIOUS BY NADDELL ET AL. IN VIEW OF SALIMANDO

The Examiner bears the initial burden of establishing a *prima facie* basis to deny patentability to a claimed invention under any statutory provision. In rejecting a claim under 35 U.S.C. § 103(a), the Examiner is required to provide a factual basis to support the obviousness conclusion. *In re Warner*, 379 F.2d 1011, 154 USPQ 173 (C.C.P.A. 1967); *In re Lunsford*, 357 F.2d 385, 148 USPQ 721 (C.C.P.A. 1966); *In re Freed*, 425 F.2d 785, 165 USPQ 570

(C.C.P.A. 1970). Further, in rejecting a claim under 35 U.S.C. § 103(a) it is incumbent upon the Examiner to establish the requisite motivation. As maintained by the Supreme Court of the United States in *KSR Int'l. Co. v. Teleflex Inc.*, an obviousness “analysis should be made explicit.” 550 U.S. 398 (2007). Rejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusions of obviousness. *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006). Indeed, the Examiner is required to make specific factual findings, not generalizations. See M.P.E.P. § 2144.08(II)(A)(5). That initial burden required by procedural due process of law has not been discharged.

With respect to the rejection of independent claim 5, the Examiner alleged that *Naddell* teaches an apparatus that determines that the apparatus arrives in a localized service area. June 21, 2012, Final Office Action, p. 5, ¶ 2. Specifically, the Office Action alleged that *Naddell*'s communication unit 108 scans for available services associated with corresponding systems and determines if it is located within the areas of the available services. *Id.* However, *Naddell* merely teaches that a communication unit 108 monitors RF communication resources for communication system activity. *Naddell*, C1/L67-C2/L1. The communication unit 108 interprets the activity and determines what services are currently available from RF communication systems within range of the communication unit. *Id.*, C2/L2-5. The communication unit 108 may further display available services for a user to quickly view. *Id.*, C2/L5-6.

More specifically, *Naddell* discloses that a communication unit 108 first chooses a system in its service table 207. *Id.*, C3/L61-62. The communication unit 108 then scans the selected system for the available service information. *Id.*, C3/L62-63. *Naddell* discloses that, if the communication unit 108 is out of range of the selected system, the communication unit 108 will

not receive any service information and will enter no information in a service table. *Id.*, C3/L64-66. *Naddell* further discloses that the communication unit 108 determines if there is a new system to be acquired for its service table 207 and, if there is a new system, acquires the services available from the system by scanning the frequency which may be transmitting that information. *Id.*, C4/L3-7.

Based on the foregoing, the Examiner asserted that *Naddell* teaches, “[the communication unit 108] determines if it is located in the areas of available services.” June 21, 2012, Final Office Action, p. 5, ¶ 2. However, there is no support for this assertion. At best, *Naddell* discloses scanning for available services that provide service information. This, alone, does not teach determining arriving within an area. Indeed, *Naddell* teaches no additional determination with respect to receiving available service information that relates to a determination that the communication unit 108 is within an area. Thus, *Naddell* cannot teach, “determines that the apparatus arrives in a localized service area,” as recited in independent claim 5.

Further, the Examiner alleged that *Naddell* teaches a message specifying that the apparatus is in a localized service area. June 21, 2012, Final Office Action, p. 5, ¶ 2. Yet, the Examiner admitted that “*Naddell* does not teach generating a message.” *Id.*, p. 5, ¶ 4. Rather, the Examiner acknowledged that *Naddell*’s communication unit 108 merely scans for available service information. *Id.* Thus, because *Naddell* does not disclose generating a message, as admitted by the Examiner, *Naddell* necessarily cannot disclose a message specifying that the apparatus is in a localized service area. Thus, according to the Examiner’s own reasoning, *Naddell* admittedly cannot teach, “the message specifying that the apparatus is in the localized service area,” as recited in independent claim 5.

Further, in view of the Examiner acknowledging that *Naddell* does not disclose generating a message, the Examiner alleged that *Salimando* teaches a wireless mobile phone determines its location in longitude and latitude and transmits the location information plus service requirements to a remote directory containing a database for providing services to the mobile phone. *Id.*, p. 5, ¶ 5. The Examiner further alleged that it would have been obvious to modify *Naddell* based on the teaching of *Salimando* in view of *Salimando* teaching a mobile phone generating and transmitting a message about its location. *Id.*, p. 6, ¶ 1. However, the mobile phone in *Salimando* does not generate the message. Rather, *Salimando* teaches that a caller determines his location and transmits the location and his requirement to a central station. *Salimando*, C1/L59-61. Therefore, *Salimando* teaches that it is the caller that determines his position (for example longitude and latitude) and generates any alleged message. *Id.*, C3/L16-20. Thus, in fact *Salimando* does not teach a mobile phone generating a message.

Further, *Salimando* does not specify in a user apparatus-generated message that the user apparatus is in a localized service area. Any alleged message taught in *Salimando* only includes user apparatus location data and a requested service. The location data only specifies the user apparatus's location, while the requested service (e.g., fuel, food, directions, auto repair, etc.) only specifies a service for which the user is interested. Neither the location data nor the requested service specifies that the apparatus is in the localized service area. Therefore, *Salimando*'s user apparatus cannot "generate a message when the apparatus determines that the apparatus arrives in a localized service area, the message specifying that the apparatus is in the localized service area," as recited in independent claim 5.

Thus, for at least the foregoing reasons, *Naddell* in view of *Salimando* would not have rendered the subject matter of independent claim 5 obvious. Because independent claims 7 and

22 recite similar features as independent claim 5, with varying subject matter, it necessarily follows that *Naddell* in view of *Salimando* would not have rendered obvious the subject matter of independent claims 7 and 22.

Further, it necessarily follows that *Naddell* in view of *Salimando* would not have rendered obvious the subject matter of dependent claims 8, 9, 14, 16-19, 21, and 24-28 at least because these claims depend from independent claims 5, 7 and 22.

Further, with respect to claim 19, claim 19 recites that “the localized service area is an airport or a cafeteria.” *Naddell* does not teach that the localized service area is an airport or a cafeteria. For example, the Examiner cited *Naddell* at column 3, lines 1-17. Here, *Naddell* teaches:

A base station controller is typically interfaced to a group of base stations (not shown) as is well known in the art. System A, via base station controller 101, transmits service information in a transmission 109 that may be received by a communication unit 108 (such as the one shown in FIG. 2) if it is in the first service area 105. System B has a base station controller 102 that covers a second service area 106. System B, via base station controller 102, transmits service information in a transmission 110 that may also be received by the communication unit 108 if that communication unit 108 is in the second service area 106. A third system, System C, is also in the general area of the communication unit 108. System C has a base station controller 103 that provides communications for a third service area 107. As is shown in the diagram, the communication unit 108 is not in the service area 107 of System C. Also shown in FIG. 1 is System D, which has a base station controller 104. This system is not registered in the communication unit's list of systems and services.

Naddell, C2/L67-C3/L18.

Nowhere in the above-recited portion of *Naddell* does *Naddell* teach an airport or cafeteria, let alone that a localized service area can be an airport or cafeteria.

Regarding claim 21, contrary to the Examiner's assertion (p. 10, last paragraph of the June 21, 2012, Final Office Action), *Naddell* is simply silent with respect to “geographic coordinates of respective base stations.” FIG. 2 merely shows a service table 207 that includes a list of

systems 208 and a list of services 209 that are associated with and/or currently available through those systems.

In addition, *Salimando's* triangulation is deployed by the remote directory station 11 (rather than the mobile station 10) to determine the location of the mobile station 10. *Salimando's* mobile station 10 does not have the capability to do triangulation. Therefore, *Salimando* cannot disclose a mobile user terminal executing the averaging step of claim 21.

Accordingly, for at least the foregoing reasons, reversal of the rejection is respectfully requested.

B. CLAIMS 13, 20 and 23 ARE NOT RENDERED OBVIOUS BY NADDELL ET AL. IN VIEW OF SALIMANDO AND ALPEROVICH ET AL.

With respect to the rejection of claims 13, 20 and 23 under 35 U.S.C. § 103(a) based on *Naddell* in view of *Salimando* and in further view of *Alperovich*, *Alperovich* fails to overcome the deficiencies set forth above with respect to *Naddell* in view of *Salimando*. Therefore, dependent claims 13, 20 and 23 also are patentable for at least the reasons independent claim 5, 7 and 22 are patentable, from which the claims depend, as well as for the additional features the claims recite.

For example, with respect to claim 20, *Alperovich's* mobile station has one and only one home zone (FIG. 6, C6/L30-60) where the mobile subscriber is not charged for the air time. *Alperovich's* mobile station compares the zone information received over the control channel with the stored home zone information in the SIM card 50, but does not “compare a current geographic location of the apparatus with a plurality of geographic definitions of a plurality of localized service areas stored at the apparatus.”

Accordingly, for at least the foregoing reasons, reversal of the rejection is respectfully requested.

IV. CONCLUSION AND PRAYER FOR RELIEF

Based on the foregoing, it is apparent that none of the Examiner's rejections under 35 U.S.C. § 103(a) is factually or legally viable. Appellant therefore solicits the Honorable Board to reverse each of the Examiner's rejections.

To the extent necessary, a petition for an extension of time under 37 C.F.R. § 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 504213 and please credit any excess fees to such deposit account.

Respectfully Submitted,

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November 20, 2012
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V. CLAIMS APPENDIX

1. - 4. (Canceled)

5. An apparatus comprising:

at least one processor; and

at least one memory including computer program code for one or more programs,

the at least one memory and the computer program code configured to, with the at least one processor, cause the apparatus to perform at least the following,

generate a message when the apparatus determines that the apparatus arrives in a localized service area, the message specifying that the apparatus is in the localized service area;

cause, at least in part, transmission of the message to a communications system; and

receive, in response to the message, one or more available services localized based upon the localized service area.

6. An apparatus of claim 5, wherein the apparatus is a mobile phone, and said at least one memory includes a removable memory.

7. A method comprising:

generating, at a mobile station, a message when the mobile station determines that it arrives in a localized service area, the message specifying that the mobile station is in the localized service area; and

causing, at least in part, transmission of the message to a communications system; and

receiving, in response to the message, one or more available services localized based upon the

localized service area.

8. A method of claim 7, further comprising:

in response to the message receiving one or more service changes at the mobile station.

9. A method of claim 8, wherein said one or more service changes involve sending of announcements to the mobile station.

10. – 12. (Canceled)

13. A method of claim 7, wherein the mobile station determines that the mobile station arrives in the localized service area by:

comparing a current geographic location of the mobile station with a geographic definition of the localized service area stored at the mobile station, and
determining the mobile station is located in the localized service area when the current geographic location of the apparatus is within the geographic definition of the localized service area.

14. A method of claim 13, further comprising:

receiving control information from a plurality of base stations at the mobile station, the control information including geographic coordinates of each respective one of the base stations; and
averaging the geographic coordinates of the base stations to obtain the current geographic location of the mobile station.

15. (Canceled)

16. A method of claim 7, wherein the message is either a short message service message, an unstructured supplementary service data message, or a dual tone multi-frequency-coded message.

17. A method of claim 7, wherein the message is sent to the communications system in conjunction with a telephone call or a data call.

18. A method of claim 7, wherein the one or more available services include announcements specific for the localized service area.

19. A method of claim 7, wherein the localized service area is an airport or a cafeteria.

20. An apparatus of claim 5, wherein the apparatus determines that the apparatus arrives in the localized service area by:

comparing a current geographic location of the apparatus with a geographic definition of the localized service area stored at the apparatus, and
determining the apparatus is located in the localized service area when the current geographic location of the apparatus is within the geographic definition of the localized service area.

21. An apparatus of claim 20, wherein the apparatus is further caused to:

receive control information from a plurality of base stations, the control information including geographic coordinates of each respective one of the base stations; and
average the geographic coordinates of the base stations to obtain the current geographic location of the apparatus.

22. A computer-readable storage medium carrying one or more sequences of one or more instructions which, when executed by one or more processors, cause an apparatus to at least perform the following steps:

generating a message when the apparatus determines that the apparatus arrives in a localized service area, the message specifying that the apparatus is in the localized service area; and
cause, at least in part, transmission of the message to a communications system; and
receiving, in response to the message, one or more available services localized based upon the localized service area.

23. A computer-readable storage medium of claim 22, wherein the apparatus determines that the apparatus arrives in the localized service area by:

comparing a current geographic location of the apparatus with a geographic definition of the localized service area stored at the apparatus, and
determining the apparatus is located in the localized service area when the current geographic location of the apparatus is within the geographic definition of the localized service area.

24. A computer-readable storage medium of claim 22, wherein the apparatus is caused to further perform:

receiving control information from a plurality of base stations, the control information including geographic coordinates of each respective one of the base stations; and
averaging the geographic coordinates of the base stations to obtain the current geographic location of the apparatus.

25. A method of claim 7, wherein the localized service area is defined independently from cells, and the current geographic location of the mobile station includes geographic coordinates.

26. A method of claim 7, further comprising:

causing, at least in part, transmission of a notification indicating that the mobile station determines that the mobile station departs the localized service area to change reception of the one or more available services.

27. A method of claim 7, wherein the localized service area is defined in a chronological term, a temporal dimension, or a combination thereof.

28. A method of claim 7, wherein the one or more available services include call pricing, call prioritization, a modulation method limitation, a communication data rate, communication connection quality, routing of incoming data to the mobile station or another mobile station, activation or inactivation of automatic call transfer, activation or inactivation of a voice mail service, or a combination thereof.